

Appl. No. 10/731,662
Amdt. dated December 29, 2004
Reply to Office action of September 29, 2004

Amendment of the Abstract

Please cancel the previous ABSTRACT OF THE DISCLOSURE and replace it with the attached ABSTRACT OF THE DISCLOSURE.

Attachment: (new) ABSTRACT OF THE DISCLOSURE

ABSTRACT OF THE DISCLOSURE

A stabilizer bar (D) for controlling the roll of an automotive vehicle has left and right sections (16, 18) joined together at a coupling (20) including a housing (36) on one of the sections and on a rotor (38) on the other section, with the rotor being in the housing. The coupling also includes a piston (40) which displaces axially in the housing in response to relative rotation between the sections, and this varies the volume in a housing cavity (80) behind it. That cavity is connected to a valve (22) having a restrictor (98) that carries an electrical coil (104). Both the valve and housing cavity contain a rheological fluid (82). The change with which the piston displaces in the housing controls the stiffness of bar, and that depends on the viscosity of the fluid in the valve. The magnetic field produced by the coil controls the viscosity of the fluid.